AMENDMENTS TO THE CLAIMS

IN THE CLAIMS:

A complete set of claims is provided below.

Please amend Claim 1 as indicated.

1. (Currently Amended) A method for arbitrating use of a network medium to avoid collisions caused by multiple nodes attempting to transmit data on the network medium at the same time, said method comprising the steps of:

sending a token packet from an active server to a first client node**, said token packet granting network medium access to said first client node;**

sending an end of token session packet from said first client to said server**, said end of token session packet relinquishing network medium access by said first client node; and**

waiting for a prescribed time period **after receipt of said end of token session packet** to allow a second client node to send a lineup insertion packet to said active server.

2. (Original) The method of Claim 1, wherein said active network server maintains a lineup card that lists one or more client nodes.

3. (Original) The method of Claim 1, wherein said token packet specifies a maximum number of packets that said first client can send before sending said end of token session packet.

4. (Original) The method of Claim 3, wherein said first client node is allowed to transmit data packets on said network medium only during a token session.

5. (Original) The method of Claim 3, wherein said first client node is removed from said lineup card when said node has been inactive for a period of time.

6. (Original) The method of Claim 3, wherein said lineup insertion packet requests insertion onto a high priority queue.

7. (Original) The method of Claim 1, wherein a presence of a packet is detected by matching a specified preamble and length sequence.

8. (Original) The method of Claim 1, wherein access to said medium is provided by a media access control layer.

9. (Original) The method of Claim 8, wherein said media access control layer provides a burst mode.

10. (Original) The method of Claim 1, wherein said medium provides multiple channels.

11. (Original) The method of Claim 1, wherein said medium is a power line.

12. (Original) The method of Claim 1, wherein said medium is a radio frequency transmission medium.

13. (Original) A networking architecture to provide isochronous and non-isochronous data transmission on a network medium, comprising:

an active server node; and

at least one client node, said active server node configured to provide a token to said at least one client node, said at least one client node configured to transmit on said medium for no more than a specified time period before sending an end of token session packet to said active server node.

14. (Original) The network architecture of Claim 13, wherein said active server node maintains a lineup card of active client nodes, said lineup card comprising a high priority queue and a low priority queue.

15. (Original) The network architecture of Claim 13, wherein said active server node polls all nodes listed on said high priority queue before polling a next node listed on said low priority queue.

16. (Previously presented)A method for transmitting data on a network medium, said network medium comprising a plurality channels, comprising:

obtaining a plurality of data packets in a source node;

transmitting said data packets, one data packet per channel, to a destination node;

receiving a multi-channel acknowledgement from said destination node, said multi-channel acknowledgement transmitted on substantially all of said channels, said

multi-channel acknowledgement providing acknowledgement information for each of said channels.

17. (Previously presented)A data network comprising:

a multi-channel network medium;

active server means fro maintaining a list of active client nodes and arbitrating access to said medium, said active server means providing a token; and

client node means for receiving said token from said active server means.

18. (Original) The data network of Claim 17, wherein said client node means comprises a multi-channel receiver.

19. (Original) The data network of Claim 17, wherein said client node means comprises a single-channel receiver.

20. (Original) The data network of Claim 17, further comprising burst mode means for sending unacknowledged data.

21. (Original) The data network of Claim 17, wherein said network medium comprises a power line.

22. (Original) The data network of Claim 17, wherein said network medium comprises a radio frequency link.

23. (Original) The data network of Claim 17, wherein each of said active server prioritizes a plurality of client node means.

24. (Original) A method for sending data on a multi-channel network medium comprising the steps of:

sending said plurality of fragments to a destination node;

receiving a response indicating which of plurality of said fragments were received and which of said plurality of said fragments that were lost; and

resending with fragments that were lost.

25. (Original) A network node coupled to a network, said node comprising:

a processor;

a memory operatively coupled to said processor; and

a protocol program loaded in said memory, said program configured to:

receive a token from a server node, said token specifying a maximum number of data packets;

hold said token;

transmit data packets on said network while holding each token; and

return said token to said server node after sending said specified maximum number of data packets.

26. (Original) The network node of Claim 25, wherein said network medium is a power line medium and said network node provides streaming data across said power line medium.

27. (Original) The network node of Claim 26, wherein said multimedia data comprises voice data.